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घरेलू उपयोग के क्यूलिनरी नाप —  
विशिष्टि  
( दूसरा पुनरीक्षण )

**Culinary Measures for Household  
Purposes — Specification**  
( Second Revision )

ICS 97.040

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भारतीय मानक ब्यूरो  
BUREAU OF INDIAN STANDARDS  
मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI - 110002  
[www.bis.gov.in](http://www.bis.gov.in) [www.standardsbis.in](http://www.standardsbis.in)

## FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Utensils, Cutlery Domestic Hardware Sectional Committee had been approved by the Mechanical Engineering Divisional Council.

This standard was first published in 1974 and revised in 1980.

In this revision, the following major changes have been made:

- a) Litre measure has been incorporated; and
- b) Marking clause has been incorporated.

Because of the difference in relative densities of ingredients, the measures are based on volumetric measure, but this does not inhibit their use for both liquids and solids as specified in any particular recipe.

This specification covers only the features, which affect the performance, and are controllable by the tests specified. The design and materials from which these measures can be made have been left to the individual manufacturer.

These measures are designed for non-commercial measurements used in preparing culinary items.

In revising the standard, assistance has been derived from IS 1325 : 1972 'Metric measuring cups and spoons and standard liter measure for domestic purposes', issued by the Standards Association of Australia.

The material shall be capable of satisfying any relevant requirements of the appropriate regulatory authority.

The composition of the committee responsible for the formulation of this standard is listed in Annex A.

For the purpose of deciding whether a particular requirement of this 'standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022. 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***CULINARY MEASURES FOR HOUSEHOLD PURPOSES —  
SPECIFICATION***( Second Revision )***SECTION 1 GENERAL****1 SCOPE**

This standard covers essential requirements for standard measuring spoons and cups used in culinary art.

**2 TERMINOLOGY**

For the purpose of this standard, the following definitions shall apply.

**2.1 Standard Spoon**

A spoon used in culinary art for measuring the volume of ingredients and whose leveled capacity is 5 ml.

**2.2 Fractional Cups Measures**

Cups used in culinary art for measuring the volume of powdered and dry ingredients, whose leveled capacity is 250 ml or fractions thereof.

**2.3 Standard Cup (Liquid) Measure**

A cup used in culinary art for measuring the volume of liquid ingredients in terms of 'cup' and fractions of a 'cup'. The term 'cup' shall be taken as being equal to 250 ml.

**3 MATERIALS**

**3.1** The measures shall be made of materials suitable for prolonged contact with foodstuffs.

**3.1.1** The materials used in the manufacture of measures shall not contain substances known to be toxic and which are capable of extraction from the measures, in significant quantities, by contact with foodstuffs or by water or steam.

**4 TESTS****4.1 Boiling Water Test**

The measure shall be immersed totally in water at  $(100 \pm 0.5) ^\circ\text{C}$  for two minutes, and then removed and allowed to cool to room temperature. After the test there shall be no visible deformation of measure, the capacity shall still conform to appropriate value, within the tolerance of  $\pm 5$  and the boiling water used shall not have any objectionable taint.

**4.2 Staining Test**

The measure, when immersed totally for 16 h in each of the following solutions at room temperature, shall not show any sign of staining after removal from solution, at the end of the above period:

- a) Ten grams of glacial acetic acid (99 percent) dissolved in distilled water to make 100 ml; and
- b) Five grams of pure sodium chloride dissolved in distilled water to make 100 ml.

**5 FINISH**

**5.1** The surfaces of the measures, including the handle, shall be smooth and free from cracks or other imperfections, and all edges shall be rounded off in a manner appropriate to the material of construction.

**SECTION 2 MEASURING SPOONS****6 CAPACITY**

The leveled capacity of the spoons shall be as follows, subject to a tolerance of  $\pm 5$  percent on the volume:

<i>Sl No.</i>	<i>Standard Spoon</i>	<i>Capacity, ml</i>
i)	4	20
ii)	3	15
iii)	2	10
iv)	1	5
v)	1	2.5
vi)	1	1.25

**7 SHAPE AND DIMENSIONS**

**7.1** The shape and dimensions of the spoons shall be such as will permit easy filling and emptying and all the surfaces of the spoon shall be easily accessible for cleaning by normal domestic procedures.

**7.2** The minimum length of handles shall normally be 100 mm. Alternatively, a short handle not exceeding 50 mm in length and suitable width may be provided, if desired by the purchaser.

**7.3** If desired by the purchaser, a hole of 5 mm minimum diameter shall be provided in the handle to facilitate hanging. A connecting ring made of non-corrosive material may be provided, if desired by the purchaser to make a set of six spoons described in **6.1**.

**7.4** If desired by the purchaser, a double-ended spoon may be constructed having measuring capacities corresponding to any two of the capacities specified in 6.1.

In case of the double-ended spoon, the centre-to-centre length shall be not less than 100 mm. Smaller handle spoons shall not be made into double-ended.

## 8 REQUIREMENTS

**8.1** Spoons shall be of sufficient strength and rigidity to withstand ordinary usage without readily becoming bent, indented, distorted or otherwise damaged.

**8.2** Preferably, it shall be possible to rest individual spoons on a horizontal surface without spilling the contents.

<i>Sl No.</i>	<i>Spoon</i>	<i>Marking</i>
i)	4 Standard spoon	4 Standard spoon or 4 Standard, 20 ml
ii)	3 Standard spoon	3 Standard spoon or 3 Standard, 15 ml
iii)	2 Standard spoon	2 Standard spoon or 2 Standard, 10 ml
iv)	1 Standard spoon	1 Standard spoon or 1 Standard, 5 ml
v)	½ Standard spoon	½ Standard spoon or ½ Standard, 2.5 ml
vi)	¼ Standard spoon	¼ Standard spoon or ¼ Standard, 1.25 ml

## 9 MARKING

Each spoon shall be clearly and permanently marked on the handle with the following:

- On the upper surface of the handle, capacity of the spoon expressed as follows:

- On the underside of the handle, the name or trade-mark of the manufacturer and letters 'SS' if stainless steel has been used.

In case of transparent materials the marking on either side shall not overlap.

## SECTION 3 FRACTIONAL CUP MEASURE

### 10 CAPACITY

The leveled capacity of the cups shall be as follows, subject to a tolerance of  $\pm 5$  percent on the volume:

<i>Sl No.</i>	<i>Cup</i>	<i>Capacity ml</i>	<i>Standard Spoons</i>
(1)	(2)	(3)	(4)
i)	1	250	50
ii)	4/5	200	40
iii)	3/5	150	30
iv)	1/2	125	25
v)	2/5	100	20
vi)	1/5	50	10

### 11 SHAPE AND DIMENSIONS

#### 11.1 Cross Section

Cups shall be of circular cross section with the sides tapering towards the base, such that slop lies between  $0.5^\circ$  and  $9^\circ$  as shown in Fig. 1.

#### 11.2 Internal Corners

The junction of the walls and base shall be rounded off to a radius of not less than 6.5 mm.

#### 11.3 Stability

The ratio of the height  $B$  to the base diameter  $A$  shall not be in excess of 2 to 1 (see Fig. 1)

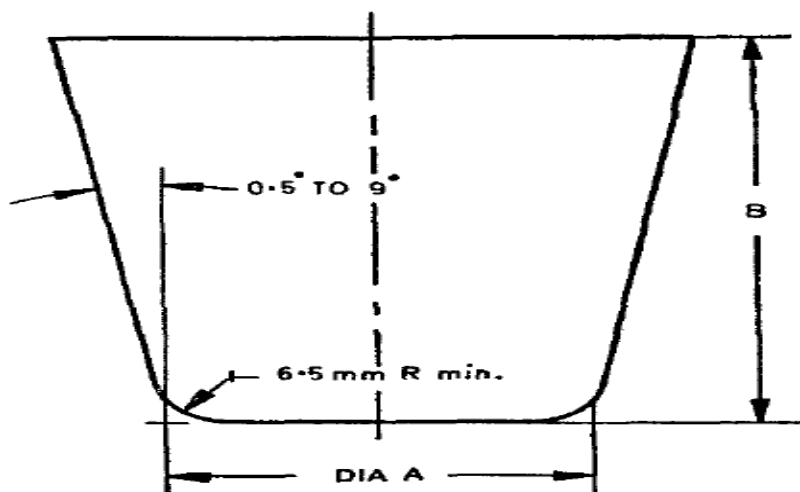


FIG. 1 FRACTIONAL CUP MEASURE

### 11.4 Rim

If desired by the purchaser, the rim of the cup may be provided with an outer reinforcing ring integral with the body of the cup. An internal reinforcing ring shall not be used. The measure shall be made so that it stands firmly without rocking.

### 12 FEATURES

**12.1** Cups shall be of sufficient strength and rigidity to withstand ordinary usage without readily becoming bent, indented, distorted or otherwise damaged.

#### 12.2 Handles

The handle of each of the measure shall have a minimum length of 25 mm and shall extend from the top edge of the measure in such a way that the measures shall fit neatly inside each other.

**12.2.1** The handles shall be of such strength and shape that they can be firmly, comfortably and safely held and shall not break or deform in domestic use.

**12.2.2** If desired by the purchaser, a hole of 10 mm minimum diameter may be provided in the handle to facilitate hanging.

**12.3** If desired by the purchaser, the 1-cup measure may be subdivided by graduation marks into 4/5, and 1/5 cup on one side, 3/5 and 2/5 cup on the other side of the circumference and 1/2 cup in between the two and the same shall be marked above the graduation line. The indentations of graduation lines shall be visible from inside to facilitate accurate measurements. No other markings shall show up on the inside of the cup.

### 13 MARKING

**13.0** Each cup shall be clearly and permanently marked with the following:

a) Capacity of cups expressed as below:

<i>Sl No.</i>	<i>Cup</i>	<i>Marking</i>
(1)	(2)	(3)
i)	1 Standard cup	1 cup - 250 ml
ii)	4/5 Standard cup	4/5 cup - 200 ml
iii)	1/2 Standard cup	1/2 cup - 125ml
iv)	2/5 Standard cup	2/5 cup - 100 ml
v)	1/5 Standard cup	1/5 cup - 50 ml

b) The name or trade-mark of the manufacturer and letters 'SS' if stainless steel has been used.

## SECTION 4 STANDARD CUP (LIQUID) MEASURE

### 14 MATERIAL AND CAPACITY

**14.1** The standard cup (liquid) measure shall be made of transparent material.

**14.2** The useful capacity of the standard cup measure shall be 250 ml.

### 15 SHAPE AND DIMENSIONS

**15.1** The standard cup shall be of circular cross section with the sides tapering towards the bottom with a slope between 0.5° to 9°. The junction of the inside surfaces of the side and base shall be curved, with the radius of not less than 6.5 mm blending smoothly into the surfaces. The ratio of height B to the base diameter A shall be not more than 2 to 1. The measure shall be made so that it stands firmly without rocking.

Other dimensions at the cup shall be as shown under:

External base diameter	60 mm <i>Min</i> ,
Internal diameter at bottom of taper	40 mm <i>Min</i> , 60 mm <i>Max</i>
Internal diameter at 250 ml marking	75 mm <i>Min</i> , 85 mm <i>Max</i>
Lowest point of the lip and top edge above 250 ml marking	15 mm <i>Min</i>
Radius of the junction of inside surfaces of side and base	≥ 2

#### 15.2 Rim

If desired by the purchaser, the rim of the cup may be provided with an outer reinforcing ring integral with the body of the cup.

### 16 FEATURES

**16.1** The cup shall be of sufficient strength and rigidity to withstand ordinary usage without readily becoming bent, indented, distorted or otherwise damaged.

#### 16.2 Handle

A close type handle shall be provided which shall be of such strength that it can be held firmly, comfortably and safely.

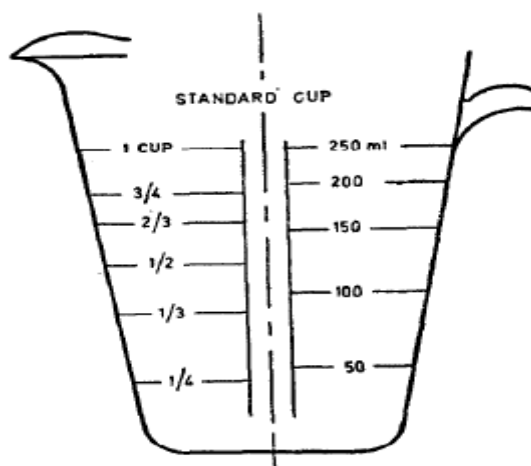
#### 16.3 Lip

There shall be at least one pouring lip directly opposite the handle.

**16.4** The cup shall be easy to clean and shall be so made as not to afford lodging places for food. The surfaces of the cup, including the handle shall be free from cracks or other imperfection, and all edges and corners shall be rounded off smoothly in a manner appropriate to the material of construction.

## 17 GRADUATION

**17.1** The graduations and markings shall be shown on opposite sides of the cup, in the manner indicated in Fig. 2.



**FIG. 2 STANDARD CUP MEASURE**

- b) Numerals and graduation marks to show 1 standard cup  $3/4$ ,  $2/3$ ,  $1/2$ ,  $1/3$  and  $1/4$  placed in the centre of lines which extend from the side of vertical unmarked panel around the pouring side of the measure to meet the vertical unmarked panel on the opposite side.
- c) Numerals and graduation marks to row 250 ml, 200 ml, 150 ml, 100 ml and 50 ml, placed in the centre of short lines which extend from the side of the vertical unmarked panel on the handle side of the measure.

The maximum permissible error in content at any graduation mark stable + 5 percent and the setting shall be made at the top edge of graduation mark.

### 17.3 Inscriptions

The standard cup shall be permanently marked on opposite sides of the cup with appropriate words and abbreviations to indicate clearly the scales for cups and milliliters. Numerals and words may be on either the inside surface or the outside surface but must be

**17.2** The standard cup shall be accurately graduated as follows:

- a) A continuous top line marking around the cup at the 250 ml level with an unmarked vertical panel of 10 mm minimum width placed centrally on opposite sides of the cup and extending downwards from the continuous line. The graduation line for a 'cup' (250 ml) shall be below the contour of pouring lip provided in the measure.

capable of being read from outside of the cup. The numerals and words shall be so located with respect to the graduation marks that there is no possibility of confusion.

## 18 MARKING

**18.1** The standard cup shall be clearly and permanently marked with the name or trade-mark of the manufacturer.

## SECTION 5 STANDARD CUP (LIQUID) LITRE MEASURE

### 19. LITRE MEASURE

#### 19.1 MATERIAL AND CAPACITY

The litre measure shall be made of transparent material. The useful capacity of the litre measure shall be one liter. Brimful measures are not covered in this section; the graduation line for one litre shall be below the contour of any pouring in the measure, as specified in **19.2**.

## 19.2 SHAPE AND DIMENSION

The litre measure shall be of circular cross section with the sides tapering towards the bottom with a slope between  $0.5^\circ$  and  $9^\circ$ . The junction of the inside surfaces of the side and base shall be curved, with the radius of not less than 6.5 mm blending smoothly into the surfaces. The ratio of height  $B$  to the base dia  $A$  shall be not more than 2 : 1. The measure shall be made so that it stands firmly without rocking. Other dimensions at the cup shall be as shown under:

Sl No	Dimension	Measurement mm
(1)	(2)	(3)
i)	External base diameter	$\geq 90$
ii)	Internal diameter at bottom of taper	$\geq 70$ and $\leq 90$
iii)	Internal diameter at the one litre marking	$\geq 100$ and $\leq 120$
iv)	Lowest point of the lip and top edge above the one litre marking	$\geq 20$
v)	Radius of the junction of inside surfaces of side and base	$\geq 3$

## 19.3 FEATURES

**19.3.1** The cup shall be of sufficient strength and rigidity to withstand ordinary usage without readily becoming bent, indented, distorted or otherwise damaged.

### 19.3.2 Handle

A close type handle shall be provided which shall be of such strength that it can be held firmly, comfortably and safely.

### 19.3.3 Lip

There shall be at least one pouring lip directly opposite the handle.

### 19.3.4 Lid

The litre measure may be fitted with a removable lid which should comply with the basic requirements relating to materials and cleaning, as set out in **3** and **19.3.5**.

**19.3.5** The cup shall be easy to clean and shall be so made as not to afford lodging places for food. The surfaces of the cup, including the handle shall be rounded off smoothly in a manner appropriate to the material of construction.

## 19.4 GRADUATIONS

The graduations and marking shall be shown on both sides of the measure, in the manner indicated in Fig. 3. The litre measure shall be accurately graduated as follows:

- (a) A continuous line marking around the litre measure at the one litre level with an unmarked vertical panel of 15 mm minimum width placed centrally on both sides of the measure and extending downwards from the continuous line.

- (b) Numerals to show

1 litre..... 4 cups

3/4 litre..... 3 cups

1/2 litre .....2 cups

1/4 litre.....1 cup

Placed in the centre of lines which extend from the side of the vertical unmarked panel around the pouring side of the measure to meet the vertical unmarked panel on the opposite side.

- (c) Numerals and graduation marks to show 1 000 ml, 800 ml, 600 ml, 400 ml and 200 ml levels, placed in the centre of short lines, and short graduation marks only at the 900 ml, 700 ml, 500 ml, 300 ml and 100 ml levels, which extend from the side of the vertical unmarked panel on the handle side of the measure.

The maximum permissible error in content at any graduation mark shall be  $\pm 5$  percent and the setting shall be made at the top edge of the graduation mark.

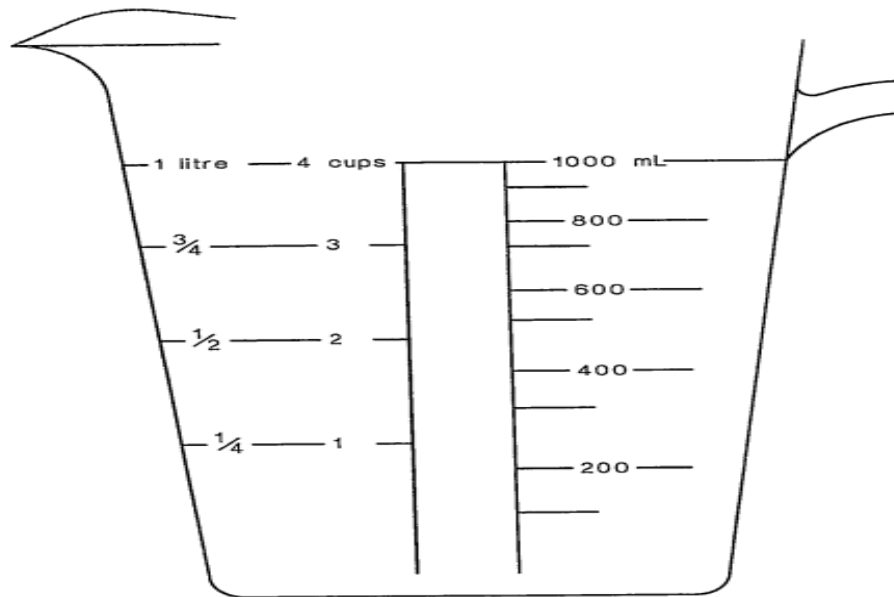


FIG. 3 LITRE MEASURE

### 19.5 Inscriptions

The Standard cup shall be permanently marked on opposite sides of the cup with appropriate words and abbreviations to indicate clearly the scales for cups and litres. Numerals and words may be on either the inside surface or the outside surface but must be capable of being read from outside of the cup. The numerals and words shall be so located with respect to the graduation marks that there is no possibility of confusion.

### 19.6 Marking

The Standard cup measure shall be clearly and permanently marked with the name or trade-mark of the manufacturer.

### 20. BIS Certification Marking

The product conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed there under, and the product may be marked with the Standard Mark.



**ANNEX A**  
(Foreword)

**COMMITTEE COMPOSITION**

Utensils, Cutlery and Domestic Hardware Sectional Committee, MED 33

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Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the website- [www.bis.gov.in](http://www.bis.gov.in) or [www.standardsbis.in](http://www.standardsbis.in).

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### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

## BUREAU OF INDIAN STANDARDS

### Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

Website: [www.bis.gov.in](http://www.bis.gov.in)

### Regional Offices:

	Telephones
Central : 601/A, Konnectus Tower -1, 6 <sup>th</sup> Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002	{ 2323 7617
Eastern : 8 <sup>th</sup> Floor, Plot No 7/7 & 7/8, CP Block, Sector V, Salt Lake, Kolkata, West Bengal 700091	{ 2367 0012 2320 9474
Northern : Plot No. 4-A, Sector 27-B, Madhya Marg, Chandigarh 160019	{ 265 9930
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